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THE FARM INDEX

September 1968

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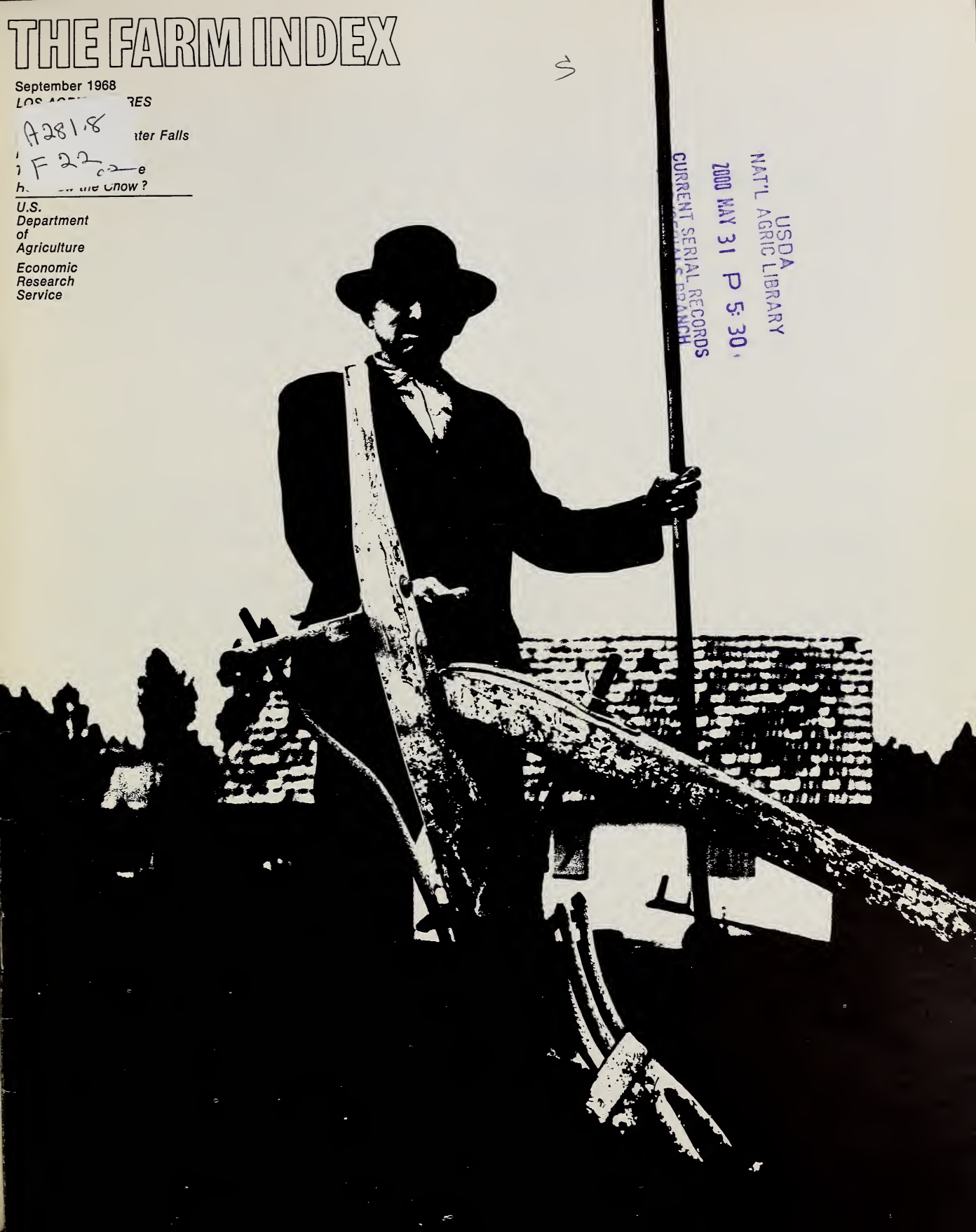
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THE AGRICULTURAL OUTLOOK

Growth in demand for all farm products is likely to be slower this fall than in the first half of the year.

The anticipated slowdown will reflect government actions taken to moderate demand expansion and reduce pressures on prices generally. These steps include the tax surcharge on corporate and personal income and scheduled cuts in proposed government spending.

But prices to farmers in the second half of the year are expected to hold near the 1967 level.

Another Wheat Record

Cropping up in 1968 is a new record in U.S. wheat production.

As of August 1, output of all wheat was estimated at 1,606 million bushels, 5 percent above last year's high.

Also at a new peak are yields per acre—thanks to markedly better growing weather than last year offered. This August, per acre yields were put at 28.7 bushels, topping last year's by 2.9 bushels and the 1958 record by 1.2 bushels.

Yield increases in 1968 are large enough to offset a decline from 1967 harvested acreage. While 63.1 million acres of wheat were planted this crop year, only 56.0 million are likely to be harvested. In 1967 seeded and harvested acreages were 68.0 and 59.0 million acres, respectively.

Total supply of wheat in 1968/69 is estimated at better than 2.1 billion bushels (including a carryin on July 1 of 537 million bushels of old-crop wheat).

The usual harvesttime decline in farm prices is being accentuated by this year's large crop, an accelerated harvest due to favorable weather, and relatively weak export demand.

In July the national average farm price

dropped to \$1.19 per bushel—the first time it has fallen below the price support loan rate since marketing certificate programs began in July 1964.

The initial reaction of wheat producers to lower prices has been to make extensive use of the loan program.

As of June 30, about 17 million bushels of new-crop wheat had been placed under loan—three times the quantity of 1967 crop wheat placed under loan at the same time a year earlier. Extensive use of the loan program is likely to continue in the 1968/69 season.

Feed Grain Carryover Up

The total supply of feed grains for 1968/69 is now estimated at 224 million tons—close to 5 percent above last year. Production is put at 174 million tons—only 1 million below the record crop of 1967.

While acreage was down from last year, growing conditions have been good to excellent so far. Combined yield per acre is estimated to be 2 percent above the record 1967 yield and 19 percent above the 1962-66 average.

Total disappearance of feed grains in the current season is now expected to be about equal to the 163 million tons in 1966/67. Carryover into 1968/69 will probably turn out to be about 49 million tons. This would be 12 million tons above year-earlier levels and the largest increase in recent years. Supply and disappearance of feed grains are expected to be in closer balance in 1968/69 than in 1967/68.

Export-Import Tally

Exports of U.S. farm products in the fiscal year ending June 30, 1968—at \$6,315 million—slipped 7 percent from a year earlier, but were 16 percent over the 1961-65 average. Lower prices accounted for most of the value decline, as the volume of exports was down only 2 percent. The agricultural import total for fiscal 1967/68 was \$4,657 million—5 percent above the year-earlier level.

Data from many sources on many subjects are the starting point for water resources research and planning—but computer systems are pace setters of progress.

Building an information system about water resources?

Then you'll need a vast reservoir of data from many sources and on many subjects.

Facts and statistics are required that relate not only to the physical properties of water, but also to activities associated with water. Activities associated with water availability include:

—Irrigation, drainage, and flood protection.

—Water use coefficients in industrial processes.

—Physical facilities for water management.

—Local, regional, and national economic activity.

Two tools are particularly effective in constructing a reservoir of such data, gaining access to it, and benefiting from its flow of facts. These tools are the information retrieval system and the data system.

INFORMATION RETRIEVAL (IR)

An information retrieval system is a system for quickly locating and selecting documents or other graphic records containing per-

tinent facts and statistics from a collection of data.

IR systems are classified into three groups—data base, reference, and text processing systems.

Data base systems process records containing data which have been organized into fields. They have a limited analytical capability built into their design and are the basis for most business type management information systems. In the organization of re-

search activities, they are often used to arrange and classify existing material.

For example, an operational data base system in the Economic Research Service contains information from the Population and Agricultural Censuses and the City-County Data Book for selected years.

The reference system contains virtually no numerical data as such, but stores and retrieves references to material rather than the actual subject content.

The Office of Water Data Coordination in the Department of Interior is implementing an IR reference system known as the Catalog of Information on Water Data.

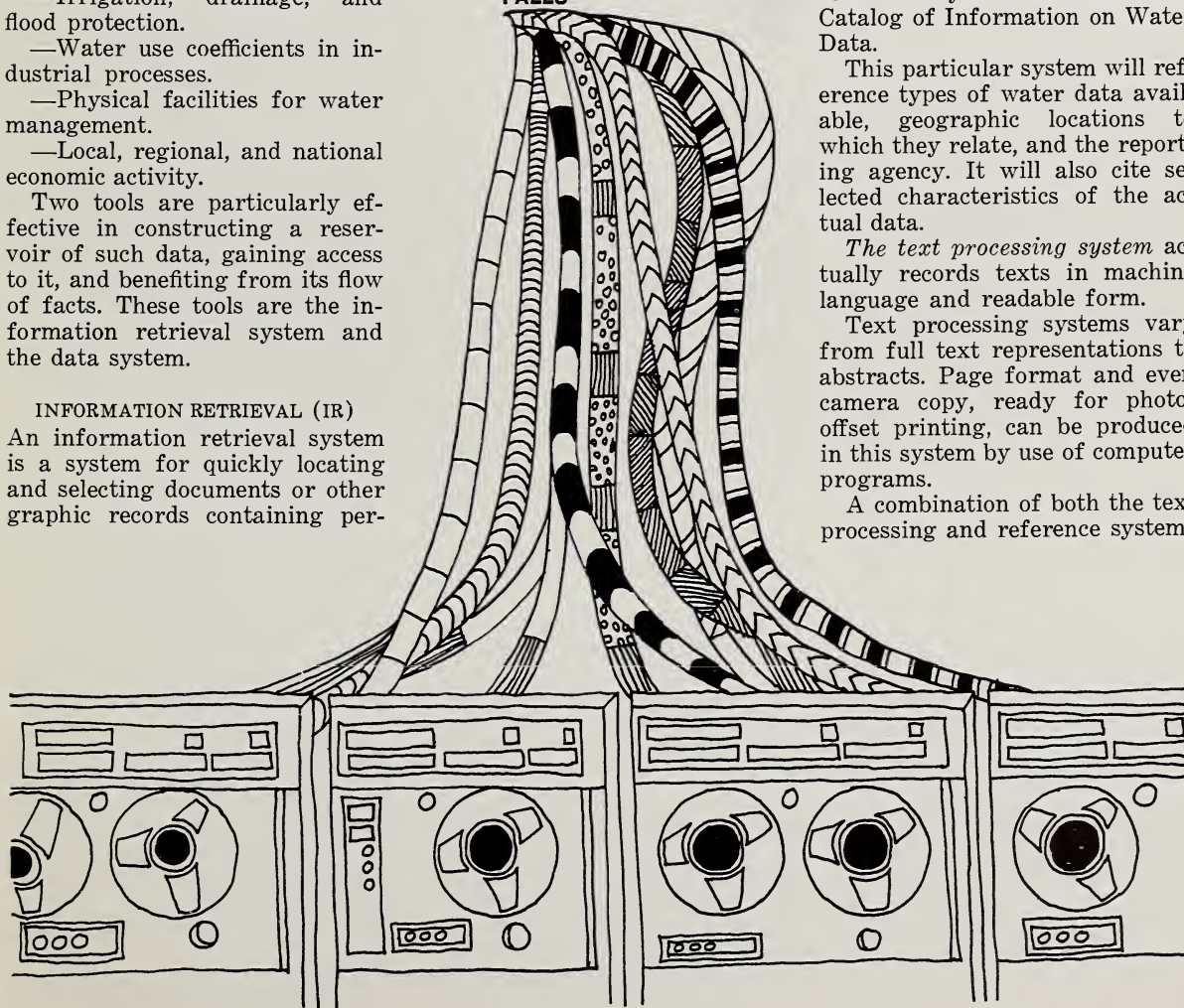
This particular system will reference types of water data available, geographic locations to which they relate, and the reporting agency. It will also cite selected characteristics of the actual data.

The text processing system actually records texts in machine language and readable form.

Text processing systems vary from full text representations to abstracts. Page format and even camera copy, ready for photo-offset printing, can be produced in this system by use of computer programs.

A combination of both the text processing and reference systems

WHERE DATA FOR WATER FALLS





Men and Milestones

DEAN OF AGRICULTURAL ECONOMISTS

Bicycling through rural England in 1899, Iowa-born Henry Charles Taylor stops to chat with tenant farmers in England about their lot in life—and let them admire his shock of red hair. He is soon on his way back to Wisconsin to finish his Ph.D. after a couple of years at the London School of Economics and German universities.

* * *

Two years later, in 1901, young Taylor was introducing a new subject—agricultural economics—to his University of Wisconsin students, who promptly nicknamed him Agrostis (*agrostis alba* is the botanical name for redtop).

For the next 18 years he continued to pioneer the field of agricultural economics. Then he joined the U. S. Department of Agriculture and in 1922 he

was named first chief of a newly established Bureau of Agricultural Economics.

While in office, Taylor inaugurated the Agricultural Outlook Service and its first national conference in 1923. He played a major role in establishing Universal Standards for cotton. He helped launch USDA's Graduate School. And he aided in the 1925 founding of the American Institute of Cooperation to help farmer co-ops get going in the right direction.

Since 1925 "H.C." has worked with the Farm Foundation and international groups, and authored *The Story of Agricultural Economics* (1952)—one of his several books.

Today, at age 95½, he's chronicling the history of family farmland in Iowa. And he keeps up with trends abroad through return visits and correspondence with operators of the European farms he visited before the century turned. (2)

—now being refined and expanded by the Water Resources Scientific Information Center of the Department of Interior—links abstracted information and references to complete publications.

A query to this combined system might take the form, "Provide information on research related to quality of water required by sugarbeet processing plants in Colorado."

DATA SYSTEMS

A data system is designed to locate, extract, and process basic elements of information which appear in the unprocessed or raw state.

Source data, in this type of system, are governed by specific rules of procedure and converted into a form appropriate for machine handling. Machine operations then classify, sort, and store information elements, perform calculations, summarize the data and record it. In general, data contained in the data system provides the basis for developing new information.

At present, data systems can be classified into two categories: data banks and analytical data systems.

Data bank systems closely resemble data base IR systems, but there is a basic difference: In the IR system, a file of data already exists in some form. With the data bank system, the file of data does not exist, as such, prior to system designing.

Data from the Conservation Needs Inventory conducted by USDA in 1958-60 is a current example of a valuable data bank.

The bank contains acreage data on the distribution of land by productivity and conservation treatment needs on a county basis. It includes information on privately owned land by major land use—cropland, pasture and range, forest or woodland, and other farmland.

Analytical data systems not only locate data but perform a

Weedicide

The only good weed's a dead weed—especially in the middle of a Nebraska cornfield.

And in the battle for control of the weed, farmers are happily getting more help from sophisticated chemical herbicides.

In a recent survey of 13 counties in Nebraska, the Economic Research Service learned that herbicide use had doubled between 1964 and 1966.

The rise in use can be partly explained by the growing acceptance of preemergence treatment—that is, getting to the weed before it pokes through the ground.

Herbicide use on the corn crop covered about 50 percent of the acreage surveyed.

This is 20 percent higher than in 1964. Of this, somewhat less than half was applied before weed growth. (3)

variety of statistical and analytical procedures.

The Natural Resource Economics Division, Economic Research Service of the U.S. Department of Agriculture, is using such a system and developing it further.

This analytical data system currently includes:

- Agricultural Census data by counties for 1949, '54, '59, '64.

- Annual State data on crop acreage, production, and value of agricultural commodities as recorded by the Statistical Reporting Service, USDA.

- Employment data gathered by the Office of Business Economics, Department of Commerce.

In the future, the system will store:

- Public Law 566 Watershed Design data for all watershed projects approved by the Soil Conservation Service, USDA.

- Nationwide cropping patterns by land resource areas.

- Land productivity data from the Conservation Needs Inventory.

- Selected data generated by River Basin Studies conducted by

various government agencies under the auspices of the Water Resources Council.

The Agricultural Census subsystem is operational. Data from the Agricultural Census are now being used as raw facts for this analytical scheme. Included are:

- Acreage and production of major and minor crops (with a breakdown of irrigated acreage and production in 17 Western States).

- Livestock numbers on farms and sales value of livestock and livestock products.

- Major land uses.

Computer programs used to operate the Agricultural Census subsystem will be incorporated in the (P.L. 566) Watershed Design data system.

Another system in the design stage that will support river basin planning is known as WRRAPPS — Water Resources Regional Agricultural Analysis and Projections System.

This system will analyse the effects of water and related land resource development on the agricultural economy.

When the system is operational, production of food and fiber in the Nation's 17 Water Resource Regions will be projected for future time periods. These projections will be dovetailed with other national estimates.

Another analytical data subsystem is being designed, using State data of the Statistical Reporting Service with a scope similar to the Census subsystem.

In addition to USDA computerized data available or planned, many agencies operate similar systems.

Office of Business Economics data, for example, are available for counties from the Population Censuses of 1940, '50, and '60. Pertinent data are summarized in 32 consistent industry sectors. Among them are agriculture, textiles, food, chemicals, communications, transportation, insurance, and real estate. (1)

Corporate Farms Mostly Family Businesses, According to ERS

They represented less than 1 percent of all commercial farms; operated 7 percent of the land in farms; and accounted for 4 percent of the gross sales of farm products.

These statistics on corporate farms in 22 States in the Middle and Far West are based on data collected during a survey last spring. Data on corporate farming in the 28 other States will be released later.

More than two-thirds of the corporate farms in the 22 States were family businesses, with farming or ranching the major activity. And family corporations represented three-fifths of the largest corporations having gross farm sales of \$500,000 or more.

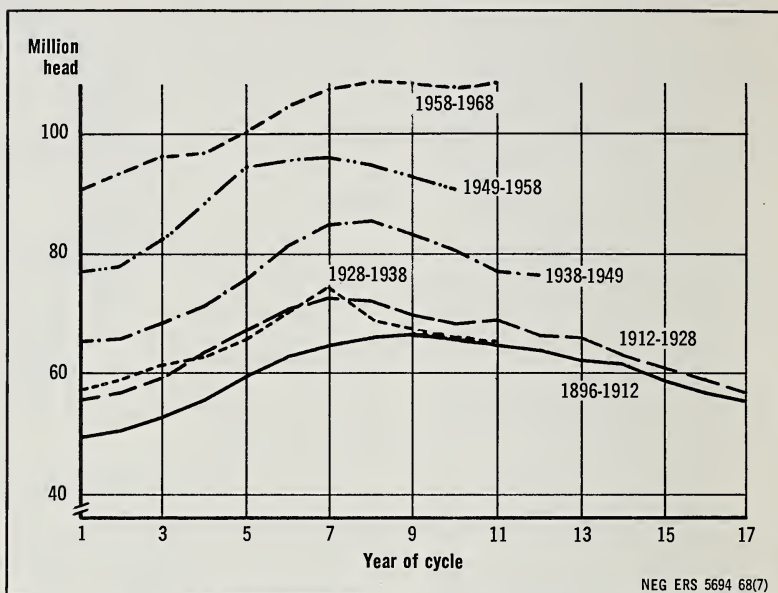
Thirteen percent of the corporate farms were tied in with agribusiness activities. Typically, these involved the manufacture or sale of feed, fertilizer, and farm machinery, or the processing and marketing of farm products.

The off-farm business activities of about 20 percent of the corporate farms were not directly related to agriculture. These were firms usually engaged in wholesale or retail businesses which also had a farm business. The farming activities of such firms generally were small.

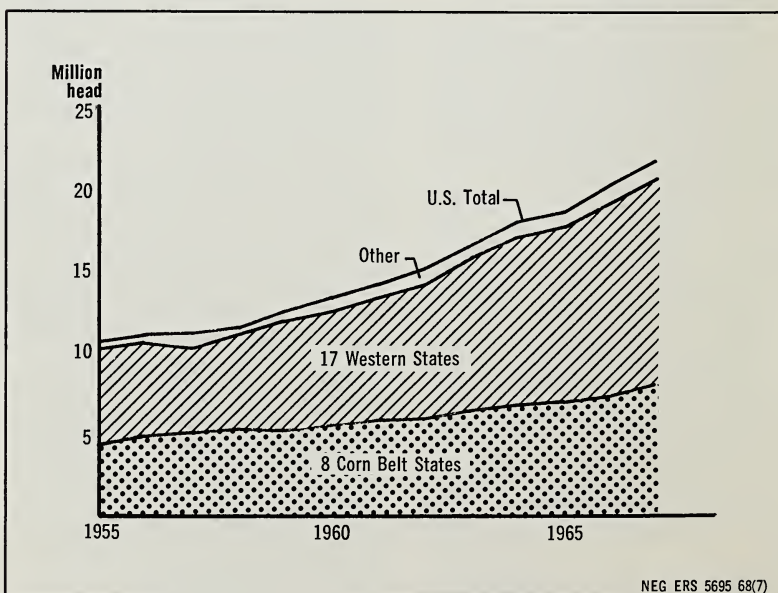
Two-fifths of the farm corporations sold less than \$40,000 worth of farm products annually. Sixteen percent had gross farm sales of \$200,000 or more; 6 percent reached the \$500,000 mark. Many of these larger operations involved cattle feeding, or turkey, egg, and broiler plants.

Corporate farming in the 22-State area was concentrated in the Mountain Region. These eight States could lay claim to two-fifths of the total number of corporate farms and had 80 percent of the land operated by all corporations. (19)

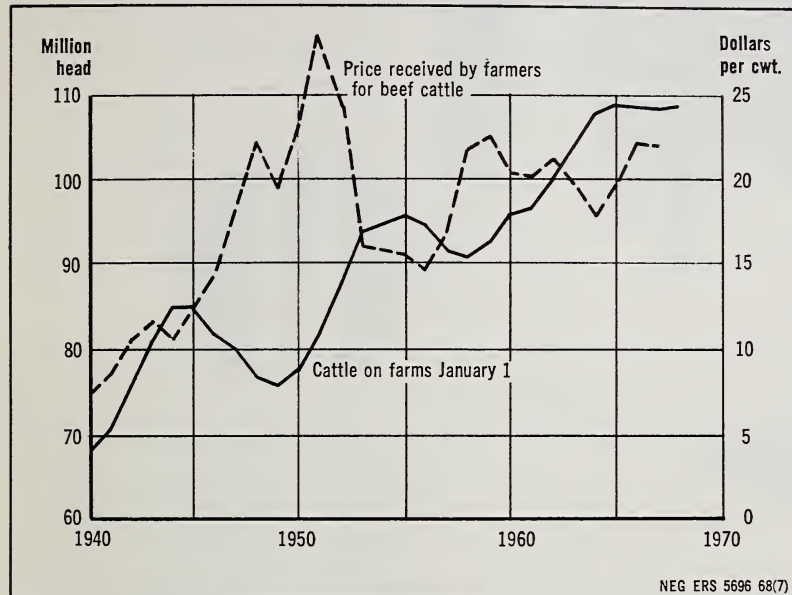
Cattle on farms: The number of cattle on farms traditionally has moved in cycles ranging from 10 to 17 years in length. Following the end of the last full cycle in 1958, cattle numbers rose for 8 years to a record 109 million head on January 1, 1965. Since then, however, the inventory has remained relatively stable and no significant change is expected in 1968.



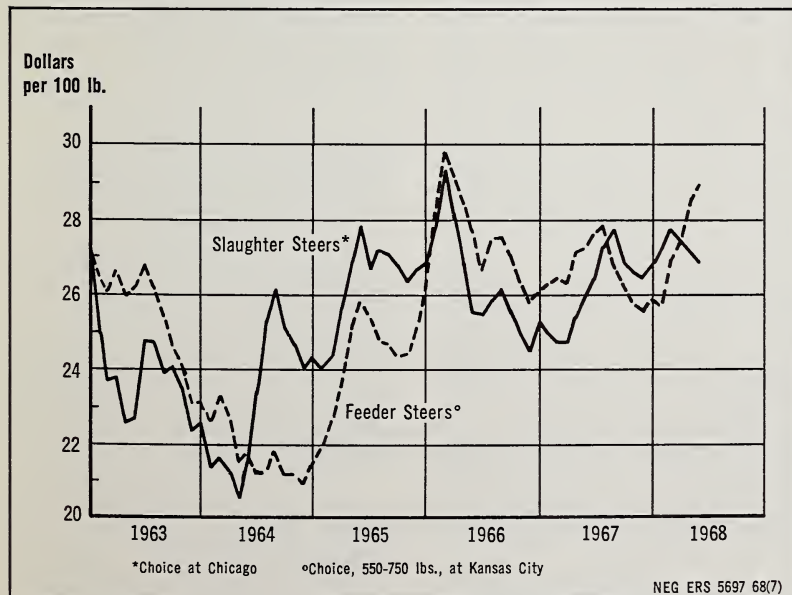
Cattle on feed: The cattle feeding industry has been expanding rapidly, with growth particularly strong in the Western States. Fed cattle marketings have more than doubled since 1955. The 17 Western States accounted for nearly two-thirds of the total increase. Last year, fed cattle represented more than two-thirds of total commercial slaughter, compared with about 45 percent in the mid-1950's.



Cattle numbers and prices: Price changes usually accompany the cyclical movements of cattle inventories and marketings. During the buildup in cattle numbers from 1958 through 1965, average prices generally declined. However, the stability in the cattle industry since 1965, coupled with increasing demand, has brought stronger prices. With little change in the inventory this year, and further strength in demand, prices can be expected to push up further.

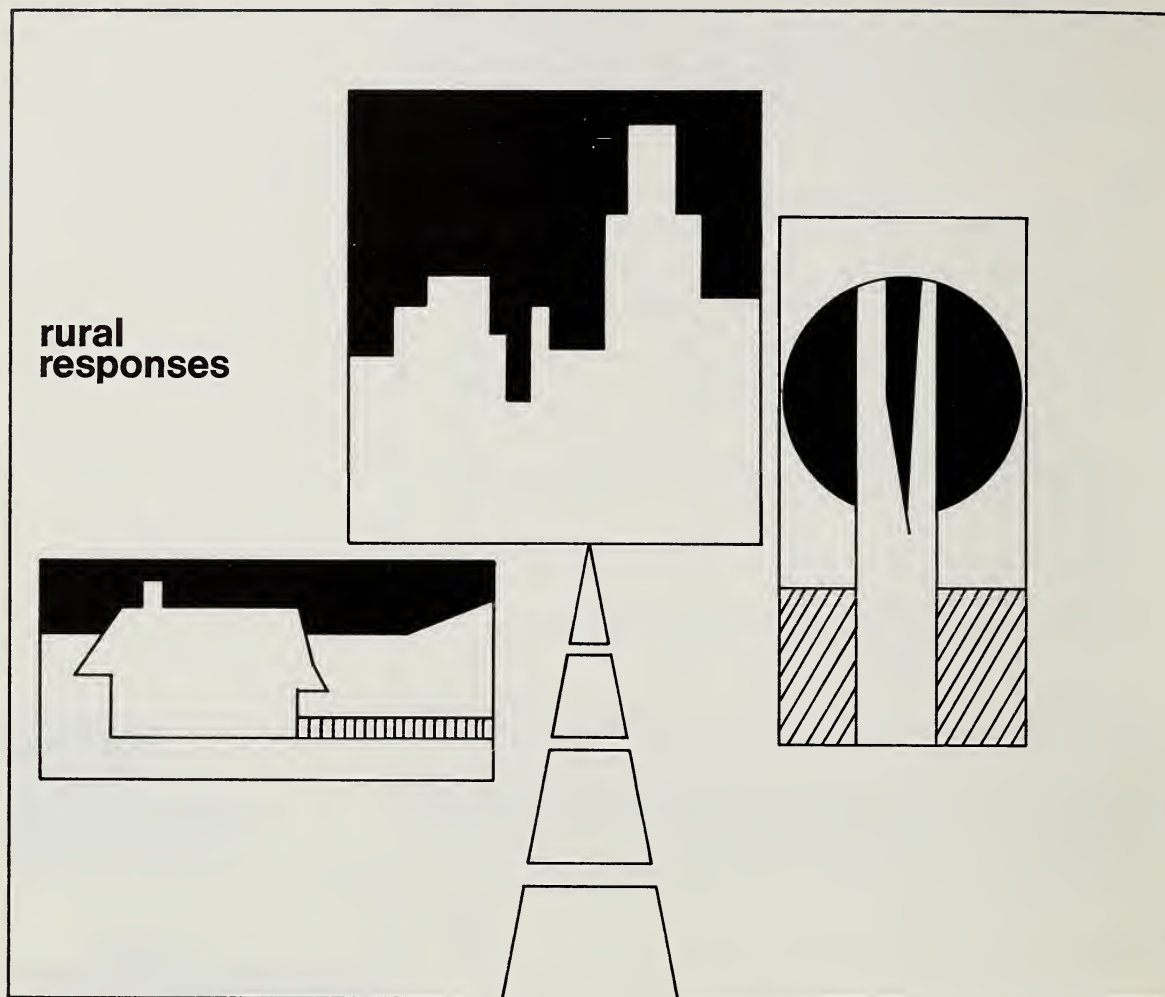


Steer prices: Feeder cattle prices generally follow the slaughter steer market — though it often takes a couple of months for them to react to changes. In June slaughter steer and feeder steer prices were averaging \$1 or more above year-earlier levels. (4)



cattle roundup





When wide open spaces begin to turn into suburbia, local government responses follow strikingly similar courses, according to a study of three Michigan townships.

The State highway that carries commuters and travelers west from Lansing, Mich., is typical of many of the heavily traveled roads passing through the rural-urban areas of other States.

There's no distinctive change of scenery to signal the end of Lansing and the beginning of Delta township. Shopping centers line

one side of the road. On the opposite side, a golf course gives way to hamburger stands and other small businesses.

As the highway continues through Delta, it passes subdivisions and farm fields—most of them unworked. Billboards advertise land for commercial development.

The city of Grand Ledge (pop. 5,000) is just inside the Oneida township line. West of there, almost all of the open spaces are being farmed, interspersed with a few subdivisions.

Six miles from Grand Ledge is the village of Mulliken in Roxand

township. It's a farm trading center and the township is almost exclusively agricultural.

Each of these townships is affected by its closeness to Lansing, though in different degrees. Their responses to urbanization were recently the subject of a study by ERS. In all three of the townships, a characteristic pattern of reacting to growth rather than initiating change was found.

The first response to population growth and suburbanization involves land-use ordinances and building regulations. These are restrictive measures designed to prevent unplanned growth and to

protect the existing character of the community. And they don't require a heavy financial or administrative commitment on the part of the township.

Only after a few years of continued expansion does the township government turn its attention to more service-oriented programs.

The board of Delta township found it necessary some time ago to shift its emphasis from minimal, community-wide services to intensive, neighborhood programs, requiring greater financial and administrative commitment.

In Oneida, where the population pressure is not yet so great, the push for high-cost, complex services has not yet been felt. Some community-wide services are being provided, however, such as street lighting.

Roxand township has adopted the county's zoning and building controls, but the slow rates of suburban growth there have made other measures unnecessary so far.

The structure of local government is one of the last things to react under the pressure of population growth. Usually change occurs only when increased public demands and needs for services require more complex governing structures than those which exist in the rural township.

Thus, judging by the Michigan case histories, responses to suburban pressures are likely to be made in this sequence:

—Regulatory measures such as zoning and building controls.

—Programs serving the whole township such as parks, refuse dumps, school programs, planning commissions.

—Intensive neighborhood-oriented programs such as street lighting and paving, sewer and water systems.

—Structural changes in local government to coordinate and administer the increased demands for services. (5)

Country Living in Ozarks: Rural Housing Shows Improvement

A 1966 survey of rural dwellings in the Ozarks area of Arkansas, Missouri, and Oklahoma indicates steady improvement over the last 18 years.

To get current information on rural housing conditions, economists interviewed a statistical sampling of rural families—including both nonfarm and farm—1,413 in all. Then they compared their findings with census data from 1950 and 1960.

Of the families interviewed, over 76 percent either owned their homes or were buying them. From 1950-1960, homeownership—which should make for greater pride in and care for a dwelling—increased from 67 to 73 percent. The sample survey indicates that this trend is continuing.

Commercial water supplies were available to almost 40 percent of the families interviewed. Almost as many used drilled wells. The rest depended on dug wells, cisterns, and springs.

Still, close to three-fourths of the occupied homes in the sample survey had hot and cold running water, indoor baths, and flush toilets. In contrast, only about 20 percent of rural housing (including vacant units) had these amenities in 1950, and 50 percent had them in 1960.

About half of the housing units were using septic tanks in 1966, while another fourth had access to public sewerage systems. These proportions are substantially larger than those found in the earlier surveys.

Back in 1950, over 80 percent of the rural housing in the Ozarks was classified as substandard. Even in 1960, over half was still below standard. But by 1966, according to the sample, the proportion had dropped to less than 30 percent.

(Standard housing in the 1950

and 1960 census is classified as either sound or deteriorating—with complete indoor plumbing facilities. The 1966 survey covered plumbing but did not attempt to determine structural condition. This is a minor difference, since census data show that few rural houses with complete plumbing were rated as dilapidated.)

To bring all of the occupied housing in the rural areas of the Ozarks up to a selected level of adequacy would cost about \$427 million. If loans and grants were used, individual loans would probably range from \$200 for units needing only a hot water heater to over \$4,600 for a unit needing all of the additions considered.

Most commonly needed are a bathroom, plumbing facilities, a drilled well, and central heat. Loans for this combination would probably average \$3,100. (6)

Differences in Farm and Urban Life Affect Definitions of Poverty

Many programs aimed at alleviating rural poverty are based on an hypothesis that the farm resident needs 30 percent less cash income to achieve the same living as his cousin in the city.

This is based on some earlier evidence that the average farmer, regardless of his income, produces about 30 percent of the total value of his family's food needs.

But studies by the ERS indicate that not every farmer can do this.

In the Mississippi Delta, only 5 percent of the poorest Delta farmers with incomes under \$1,000, had food-producing gardens. And in the Ozarks, only 4 percent had them.

Only 43 percent of the Delta farm families with incomes under \$3,000 produced any meat in 1965. In the Ozarks, the percent-

age was about the same.

As definitions of "poverty" for statistical use become more refined, other considerations than the value of food consumed will probably be added to distinguish between farm and city poor.

For example, farm families without access to city transit systems spend much more on transportation than do city people—and they usually have to travel farther distances to get what they need in the way of goods and services which may be inferior in some way to those in the city. (7)

What Makes a Man Feel Old Isn't Just Candles on His Birthday Cake

If a man is only as old as he feels, what makes him feel old?

Grandchildren, for a starter. Contrary to popular belief, a couple of grandchildren romping around will make a man of 50-plus feel older than his grandchildless counterpart.

Company personnel records are another thing. They're always in the file as a constant reminder of age for the wage or salary worker and his boss. And they can make a man "think older" than a self-employed individual. The man who works for himself can pretty much ignore his age, since he controls his own retirement dates.

There's retirement, too. Once a man quits work and begins to live off pensions and investments, he often sees himself as older than his on-the-job counterpart.

Health, of course, can add or subtract years from a man's mental age. The man of 55 who does not feel as chipper as a few years ago frequently feels older than men of the same age who report no sense of declining health.

Once a man starts "thinking old," his friends have a problem. For they're going to age, too—at least in the mind of the man who feels older than his years. (9)

Specialties

A transit authority . . . housing authority . . . drainage district . . . irrigation district . . . area development authority . . . local improvement district.

These special districts and authorities are all part of the machinery of Federal, State, and local governments for the conservation and development of national resources.

And they're about the most important public means for providing urban levels of service to the increasing population outside municipal boundaries—though their work involves city problems as well.

Some of their concerns include air and water pollution control, hydroelectric and water storage dams, interstate highway construction, and area economic development.

For anyone interested in the work of these agencies, a new Economic Research Service publication should prove useful.

Its title: *A Selected Bibliography on Special Districts and Authorities in the United States, Annotated* (Miscellaneous Publication 1087).

Included are 250 listings of articles and books from government and general sources, law reviews, and professional journals. The listings are indexed by subject, author, and State. (8)

How Not To Convert Farmland To Suburban Housing? Plan Ahead

Glenwood Farms. Rolling Acres. Chances are they're not farms—they're subdivisions.

Urban sprawl has put a lot of agriculturally productive acres underneath housing plots and shopping arcades.

Rising land values, taxes at the edge of cities, and the high cost of modern farming equipment and inputs make farming difficult in many metropolitan areas of the country.

A community or region that wants to preserve its agricultural base has to plan for the future.

Which part of its land is best suited for farming?

Would it be more feasible to use this land as pasture for grazing livestock rather than for crops?

Are truck farming and dairying the answer for farming on the urban fringe?

Each community or region must deal with its own set of circumstances. But comprehensive planning with attention to zoning and differential tax assessments for farmland can help protect an area's agriculture. (10)

When Uncle Sam Goes Rural, His Kind of Business Affects Results

When a Federal installation moves into a rural area, there's bound to be an effect on the local economy.

How much of an effect there is Depends on type of installation.

Research centers and schools, for example, bring in new people and provide jobs for local residents. They become an integral part of the local area, economically and socially.

A military post, on the other hand, is usually a self-contained city, though it employs some local people. Its effect on the local economy is not as great as that of other projects, since many of its families' needs are met on the base.

In 1960, about 73 percent of all employment in Pulaski County, Mo., was dependent on or related to Fort Leonard Wood. Many farmers find off-farm employment there, part-time or full-time.

Perhaps the greatest impact of the Fort has been on the local school system. Ninety percent of the area's 5,000 school children are from families connected with the Fort. This has meant extensive school construction and nearly \$1 million in Federal school aid annually. (11)



Renderers have a lot of garbage to collect from livestock industry but have trouble turning a profit while trying to satisfy demands of society and business world, too.

Renderers pick up, process, and peddle animal fats and protein supplements, among other things.

In this role, they serve as garbage collectors for the Nation's livestock industry. Annually, they collect over 5 millions tons of material that no city dump, incinerator, or sewerage system could or would handle.

And the rendering industry is now in a difficult position.

The livestock industry says: "Take our offal, fat, and bones (for a price, of course) so we can have clean plants."

The farmer says: "Take my dead stock because the State says it must be disposed of suitably in 24 hours, and I don't want to dig a hole."

The feed manufacturer on the output end says: "Give me salmonella-free protein of a higher, more uniform quality."

The tallow user asks: "Why can't you upgrade and standardize my product?"

And society stands in the middle, solidly stating: "We want clean water, clean air, clean trucks, and clean plants—along with a living wage for your employees."

Meanwhile, in the past 20 years, production costs of renderers have increased about 300 percent and tallow prices have dropped around 60 percent. It is estimated that half of the country's rendering plants, large and small, operated in the red last year.

Resolving the problems of the rendering industry will be difficult. Goals of society will probably be met through legislation. But in order to satisfy the demand of buyers for higher quality products, renderers will have to

change some of their ways of doing business or lose customers.

Assuming that prices for the renderer's products will continue low and his costs will continue to increase, the renderer has two courses of action.

Stepping up the efficiency of processing operations is one obvious course. The other, which many renderers overlook, is to make some changes before that point. For example:

There's no place a rendering plant can lose money faster than in the collection of raw materials.

In general, renderers make money on large accounts—even though they pay more for the material. And they lose money most often on small accounts.

For example, a renderer often pays a store the same unit price for 10 barrels of fats and bones a week as he pays for 2 barrels. Or he pays the same price to all locker plants, whether they are 40 miles or 4 miles away.

The effect of both tonnage and distance on pickup costs warrants a price differential.

Hauling costs count up, too. Few renderers see the hidden costs in hauling. If they did, it would be easier for them to decide how much to pay or charge for picking up material.

The collection route is a long one. It begins in the barnyard and ends at the retail chainstore. (For every 100 pounds of retailed meat, about 15 pounds of fat and 10 pounds of bones go out the back door.)

A renderer with a 2-ton truck can figure hauling costs at a minimum of 18 cents a mile, excluding the driver's wages.

Add \$2 per hour for the driver in rural areas, and hauling costs jump to about 28 cents a mile. So if a renderer goes 20 miles to pick up a 200-pound hog, the price he gets for fat and cracklings will only cover the hauling cost. And he loses money processing the critter.

The city renderer is more likely to pay his truck driver \$4 an hour. This pushes up hauling costs to about 38 cents a mile, or \$6.70 per hour—or 11 cents each minute the truck is on the road.

Assuming a pickup every 10 minutes, each city stop costs \$1.10. If processing costs are 70 cents a hundredweight and yield of product is 35 percent, any pickup under 100 pounds is a losing proposition. Most renderers only break even on stops for 150-400 pounds. Restaurants or "grease accounts" are a prime example of small-volume stops that might be charged or dropped.

A renderer might also take a look at his hauling costs on a per ton per mile basis.

A loaded truck costs about 3 cents more a mile to operate than an empty one. (And a truck seemingly never breaks down empty.) The astute renderer will start his pickup at the farthest end of a run and increase the load as the truck comes toward the plant—

adding a large volume last, if possible.

Ironically too, a driver often spends more time on non-productive functions than actual work:

Waiting to position a truck rather than rolling barrels a few feet. Trying to make a faulty tail-gate work. Or shifting several poorly arranged barrels of material that's already loaded for every barrel that's picked up.

At 11 cents a minute for truck and driver, such moments are costly. (12)

Hidebound Approach Can Depress Profits of U.S. Tanning Industry

The old bucket brigade was a laborious, inefficient way to get water to the fire.

Similarly, today's multiple handling of hides and skins on their way to the market often leaves the tanner with a meager share of the final returns.

Before they reach the consumer, hides frequently pass through six ownerships: packinghouse, hide dealer, tanner's selling agent, manufacturer, wholesaler, and retailer.

Some firms in the tanning industry have tightened the supply line by integrating operations either vertically or horizontally. And more mergers can be expected.

Meanwhile, tanners tend to spend considerable time shopping for bargains in rawhides so they can shave their costs and salvage more profit. Less effort has been devoted to product quality and sales promotion. And this means research, advertising, and plant modernization.

Capital investment in new plants and equipment is regarded by many as the most pressing need.

Cost engineering studies indicate that in many industries new facilities have lowered processing

Let's CO-OPerate

October is Co-op Month '68. And "Cooperatives—Community Builders" is this year's theme.

Eleven special national events are scheduled. In Washington, D.C., opening day ceremonies will be held Oct. 1, International Co-op Day on Oct. 21 and a Cooperative Craft Exhibition at the Smithsonian Institution, Oct. 3-27.

Elsewhere many governors and other State and local officials plan proclamations declaring October Co-op Month. Spearheading activities is a committee made up of officials from 11 Federal departments and agencies, 10 cooperative organizations, and the Food and Agriculture Organization of the United Nations.

Others taking part include leaders and members of farmer cooperatives, forestry groups, farm credit associations and credit unions, rural electric and telephone cooperatives, health, housing, grocery, and consumer buying co-ops. (21)

costs by 15 to 25 percent—a saving unattainable by piecemeal improvements. Yet the tanning industry invested only about 1.3 percent of its net sales in new equipment in 1965, compared with 6.7 percent for the textile industry.

Research is another investment that pays proven dividends. Today's fast changing world wants a constant flow of new, improved products. And the research to produce them costs money. One major food firm puts 10 percent of net sales into research, and some drug manufacturers as much as 30 percent.

The chemical industry spent about 4.2 percent of its net sales on research in 1965. If the tanning industry spent at the same rate, research and development expenditures would be about \$11.5 million annually.

But the budget of the Tanners Council Laboratory—on which the tanning industry depends for basic research—was just \$118,000 in 1965. Of this, \$55,000 was contributed by the industry, and the rest came from government or private sources. (13)

Computers Chart Course Milk Might Take If It Flowed Freely

In most of our major metropolitan areas milk prices paid to farmers are set by Federal order. That is, local market administrators determine prices from evidence presented at public hearings. And higher or lower prices prevail in different markets.

What would happen if there were a free flow of milk between these different markets? Would milk dealers in low-price areas find it profitable—even with transportation costs added—to sell milk in high-price areas? And what would happen to retail prices in both areas?

Until recently the answers to

such questions have mostly been academic. Marketing specialists could, of course, take many variables into consideration and provide an educated estimate of what would happen.

But there is no way to test out the various possibilities without drastically disrupting the economy of the dairy industry in the test area.

So the Economic Research Service decided to try out the problems on a computer.

Among other data, researchers fed into the computer the assumption that, in 1965, bulk or packaged shipments of Class I milk (regular fresh milk as sold in stores) could flow freely to or from 76 markets at a transport cost of 1.5 cents per hundred-weight per 10 miles.

The results were as follows:

The Chicago and Detroit markets would have shipped out the most milk by far. Nearly 29 million pounds of milk, or 7 percent of its actual 1965 supply, would have left the Chicago area for higher priced areas and the Chicago Class I milk price would have risen 28 cents.

Detroit's actual 1965 Class I milk price was higher than Chicago's, but lower transport costs to the big Eastern cities would have made the Detroit area a cheaper source of milk for those markets.

Thus, according to the computer, Detroit would probably have shipped out more of its milk than Chicago. Almost 37 million pounds or 11.2 percent of its total milk supply would have left, raising Detroit's Class I milk price average 42 cents.

This, in turn, would have caused a jump of 2 cents per half gallon in the retail price of milk in Detroit, 1 cent a half gallon in Chicago.

Who would get the milk that would have been shipped out of these areas?

Most likely the major portion would have gone to high-priced

Sap Tap

If there's anyone who needs sympathy more than a flapjack lover without his favorite maple sirup it must be a maple sirup farmer without the sap to make it with.

That's just what happened in 1967 and 1968. Bad weather inhibited the sap flow and maple sirup production was down. But imports, mainly from Canada, were stepped up to fill part of the need. Production of cane and maple sirup blends was expanded though some blenders reduced the maple sirup content of their mixtures from about 15 percent to 10 percent. And sales of imitation maple flavored sirups are up, too. (20)

areas in the Northeast—Connecticut, Philadelphia, Baltimore, and Washington. And much of the milk would have gone into various Midwestern markets to replace shortages in 1965 milk supplies as far south as Paducah, Ky.

In these areas, retail prices of milk would have gone down, 2 cents per half gallon in Philadelphia, 1 cent per half gallon in five other markets, and by fractions of a cent elsewhere.

In addition to Eastern Seaboard markets, Arkansas, Louisiana, Mississippi, Nebraska, and South Dakota would all have had lower milk prices if free flow of milk supplies had been allowed between low- and high-priced areas.

By running this test on the computer, the researcher can give those in the dairy industry a chance to see the probable results before making costly adjustments.

Other pricing and marketing questions may be similarly tested by computer. And dairymen, processors, marketing specialists, and consumers all stand to benefit from the knowledge gained through the use of this valuable research tool. (14)

LOS AGRICULTORES



Farmers in our Southern Hemisphere must cope with problems in developing their agriculture. Among them are limited education and lack of modern marketing aids.

He's a big rancher whose gauchos ride herd on thousands of cattle in Argentine pampas.

He's an Andean Indian barely making a subsistence living on his share of ancestral lands.

He's a sharecropper, planting what he's told and trying to make ends meet.

He's an inquilino in Chile whose family has held the same small

section of land for years, in exchange for their labor on the land of the fundo.

He's the Latin American farmer. And he plays many roles in the 23 nations south of the border.

By far the largest number of farmers in Latin America are small landholders or peasants employed as farmworkers. Most of them still till the land in the ways their fathers taught them.

As in the United States, large numbers of rural people have been migrating to the cities. But the farm population of Latin America also continues to grow and the pressure for land increases.



The high growth rates in both urban and rural Latin America put a great strain on local services such as police, health, electric power, and sanitation.

Too, the rising influence of the urban areas eclipses the political voice of the small farmer in his own affairs.

Education for the farmer's children is hard to come by in many countries, so the farm population is largely illiterate.

In many rural areas—with the exception of Chile, Argentina, Uruguay, and Costa Rica—there are no schools. And the nearest village school may be too far away.

The percentage of school-age children actually in school drops with each succeeding grade. In Colombia, Guatemala, and Honduras—according to recent surveys—only 1 to 4 percent of the pupils who had entered the 1st grade ever reached a 4th grade desk. In Mexico the figure was 8 percent; in Venezuela, 15 percent.

Few farm children reach secondary school and the university.

Even if education were made immediately available to these children, it would be at least 10 years before its impact would really be felt among the farming population.

And with little education and literacy, it's difficult for Latin American farmers to take advantage of even the limited research and extension work in agriculture that is being done.

Agricultural research in Latin America is largely monocultural. Intensive work is being done with single crops, developing new and healthier varieties. But little attention is paid to the advantages of rotations and crop combinations aimed at maximum productivity and good soil management.

Much attention has been given to the role that fertilizer plays in increasing crop yields and determining when it becomes unprofitable.

Only recently, and only in a few countries, has research been directed to farm management problems. In most countries there has been little interest in the wisest use of credit, or economy in use of farm labor, power, and equipment, or in marketing problems and price relationships.

In addition to government-sponsored research, much has been done by various private interests. In Mexico, the Rockefeller Foundation collaborates with the government in the Office of Special Studies; in Venezuela, an American oil company cooperates in research on plant disease control.

But the average farmer in

Latin America, usually isn't in a position to benefit immediately from this work.

In most countries, the extension services are inadequate. Following the monocultural attitude toward research, extension services are frequently fragmented. In Colombia, for example, there are specific agencies for coffee, cotton, tobacco, and rice. It is common to find separate extension agencies for crops and livestock.

Travel is very difficult for extension agents. Budgets are limited and there are seldom enough vehicles for all the agents.

Compounding these problems is the fact that many extension agents have learned what they know in agricultural colleges—not on farms—and have trouble working directly with farmers. Recognizing this, the extension services of some countries employ nonprofessional assistants, often raised on farms, who are more often able to talk to farmers in the words they use among themselves.

Deficiencies in education and information aren't the only problems that beset the small Latin American farmer.

He's confronted with a lack of modern marketing systems and facilities. Tariffs and protectionism keep prices of farm machinery and some other inputs high. There's little or no regulating structure for the prices he receives. And there is a continuing need for land reform. (15)

ARGENTINA and its pampa

Agricultural abundance is traditionally linked to a relatively few great productive areas of the world. America's Midwest is one of them. Others elsewhere in the world include the Po Valley, the Danubian Plain, and the

steppes of the Ukraine.

And there's the Pampa, too.

Heartland of Argentina, this vast and fertile area has helped to make that nation one of the world's biggest agricultural producers and exporters.

The Pampa covers about a quarter of Argentina's total land surface of over 1 million square miles, which sprawls lengthwise from the semi-tropics in the north to the Antarctic in the south. And with this spread of soils and climates, the country can produce almost anything that grows or grazes.

It is therefore not surprising that Argentina has become self-sufficient in virtually all agricultural commodities. Agricultural imports (accounting for only 5 to 10 percent of total imports) are limited to tropical products and a few minor items—including U. S. breeding stock and field seeds.

Agriculture provides employment for about one-fifth of the country's labor force. And while farming contributes only about 15 percent of the gross national product, farm products account for 90 to 95 percent of the total value of exports.

Argentina is one of the world's top suppliers of many farm products. It outranks all other countries as a world supplier of beef, linseed oil, and milling byproducts. It is second only to Italy in exports of apples.

It figures prominently in world trade of other deciduous fruits, meat products, wool, edible oils, animal fats, and dairy products. And its wheat, feedgrains, and hides and skins compete strongly with these U. S. farm products in the world marketplace.

Since the end of World War II, the Argentine share in world exports of all the above items has ranged from 7.5 percent for cattle to 60 percent for linseed oil.

Western Europe is the major market. It takes about two-thirds of Argentina's total agricultural

THE FOREIGN SCENE

exports, which have run as high as nearly \$1.5 billion (in 1965). While exports to member countries of the Latin America Free Trade Association (LAFTA) have gained, they are still only 15 percent of Argentina's farm export sales.

Despite the apparent adequacy of Argentine agriculture, progress has not been spectacular.

Output of farm products has been stepped up rapidly enough in the 1960's to keep well ahead of population growth. But over a longer period of a quarter century (between 1936-40 and 1961-65), there were more "downs" than "ups" in the output trend. Consequently, for the quarter-century period, production edged up at a compound annual rate of only 1 percent—while population grew at a rate of 1.7 percent.

How much output can be raised in the future will depend largely on development of the general economy, national agricultural policy, ability to intensify agriculture, and foreign demand for Argentina's major crops.

Potential production of almost any commodity is great, considering the vast amount of unseeded land and the hitherto unexploited use of agricultural technology.

The possibilities are illustrated by the expansion of grain sorghums from annual output averaging 29,000 tons in the early 1950's to 1.1 million tons in the early 1960's. During the same period, the tea crop was boosted from 1,500 to 83,600 tons.

Productivity of the Pampa, however, will continue to be an underlying factor in future production trends, as it has been in the past.

As the most favorable area for agriculture, the Pampa is the major source of bread, meat, and dairy products for the population of Argentina's cities and their suburbs. And products of the Pampa fill the basket of exportable commodities as well.

Competition between crops and

livestock for land in the Pampa is likely to continue strong. Production patterns of other regions are less flexible because of necessary adaptations to natural and economic problems—including inadequate transport and marketing facilities and relatively few government-sponsored development programs.

Sheep ranching has been admirably adapted to the windswept, arid plateaus of Patagonia, and there is little reason to think that ranchers there will attempt to shift away from wool.

Likewise, most farmers in the Western river valleys will probably continue to rely on fruits and vegetables for a living; in the Northwest, on sugar and citrus fruits; in the Chaco, on cotton; and in the Northeast, on tea, tobacco, and tung nuts.

Future decisions of Pampa ranchers on the relative profitability of beef versus grains and oilseeds are likely to affect the future volume of U. S. agricultural exports of the latter commodities to some degree.

When export crops of grain and oilseeds appear to offer greater returns to Pampa ranchers than the domestic or foreign market for beef and animal products, they expand grain and oilseed acreage and reduce the grazing area. When beef prices become more remunerative, the land use is reversed.

Up to now, Argentina's principal advantages in world markets have been low production costs and high quality. These are important considerations, since the Argentine government has been unable to provide the subsidies often used by competitors to support exports.

In the world grain trade, where competition is strongest between Argentina and the United States, Argentina supplied 15.5 percent of all feed grains in the 1966-67 fiscal year (U.S. share, 49.4 percent) and 5.5 percent of the wheat (U. S. share, 35.6 percent). (16)



Fertilizer: Base of Latin American Community Patterned After EEC?

In Europe, the coal and steel industries set the standard of economic cooperation with their highly successful community. In Latin America, it could be the fertilizer industry.

Though lacking the glamour and prestige of coal and steel, the fertilizer industry offers interesting possibilities for fostering closer economic ties between nations south of the Mexican border.

So far, however, Latin American nations have made little actual progress in establishing a community—even though a few of them have granted tariff concessions.

In the absence of regional coordination, the fertilizer industries in many South American countries have tended to become highly protected and self-sufficient within their national boundaries.

It was just this kind of traditional, nationalistic competition that European leaders particularly wanted to avoid after World War II when they sought to create some economic order out of chaos.

The first step they took was to form the European Coal and Steel Community. And the economic integration of Europe was thus set in motion by the regional integration of one key industrial group. Later, in 1957, they created the European Economic Community (EEC) and the European Atomic Energy Community (EURATOM).

The success of the European experience has encouraged many Latin Americans to think they can do likewise. And the fertilizer industry seems to be the logical place to start—since fertilizers are as vital to the development of an agricultural continent like South America as coal and steel were to the redevelopment of industrial Europe.

Efficient, economical operation of a fertilizer plant, however, re-

quires more capital and larger markets (and better transport facilities) than can usually be found within a single Latin nation.

But throughout the whole of South and Central America there is great need and demand for fertilizer—demand which by all indications will become heavier in the next 5 years.

Most of the necessary resources to satisfy this demand are present within the area. However, if fertilizer is to be made available to producers at reasonable prices, plants must be located where they can make the most efficient use of these resources.

Moreover, governments are usually more willing to make limited commitments with reasonably clear consequences than to plunge headlong into integration of all industries.

This has been true of Europe. And it is probably true, also, of Latin America. If so, the fertilizer industry seems a likely take-off point for economic integration of Latin America on a regional basis. (17)

Foreign Spotlight: Peru and Wheat

Peru's wheat imports may be running at about a million tons a year by 1980, according to projections made by the Economic Research Service.

At the projected rate, Peru would be a pretty good customer for the world's wheat exporters. Whether it will be a good customer for U.S. wheat exporters is another matter.

So far we've done pretty well in building up the size of our wheat exports to Peru. Between 1957 and 1967, our shipments have ranged between 35,000 and 240,000 metric tons.

The low came in 1963. That year U.S. wheat exports to Peru were shifted from a concessional to a predominantly commercial sales basis and dropped 143,000 tons from 1962 volume.

It didn't take us long to recoup our losses, however. By 1966, Peru's wheat imports from the United States were back up to 165,000 tons.

And last year the country's 240,000-ton purchase of U.S. wheat made it one of the larger U.S. cash markets for wheat in Latin America.

But competition in the market is keen—and bound to get keener as Peru's wheat imports pick up. Argentina and Australia are bidding strongly for Peru's wheat trade. Both compete with us in prices, and Argentina also has reportedly offered Peru a \$20-million credit for financing imports of Argentine wheat, meat, and vegetable oils.

Last year Argentina's exportable wheat supplies were relatively low, which helped our own sales. But Argentina is back in the Peruvian market in a big way.

While our wheat exports to Peru through May of this year were slightly ahead of those in the same period a year earlier, our share of the import market was only 20 percent; Argentina's was two-thirds. U.S. shipments may, however, pick up in the latter part of 1968 as the supply positions of competitors weaken. (22)



How Now the Chow?

Food's big in a soldier's life. American Armed Forces chowlines go 'round the world and fare's changed in the years between Valley Forge of '78 and Vietnam.

It may come on a cafeteria mess tray. Or it may be borne by a convoy of heavy trucks sliding along a narrow, muddy road toward a Vietnam campsite. And if there is no road, tanks or am-tracs fitted with bulldozer blades will make one.

The military field kitchen does its job and the hot food gets through.

Today's military menu isn't what it used to be.

No indeed! Troop feeding methods have changed drastically since the days of World War II and subsequent conflict in Korea.

In the early 1940's K-rations were the standard fare. Hard dry

crackers, soft cheese, chocolate bars, and cocoa provided sustenance in the field.

Then came C-rations. They supplied basic food nourishment for nearly 3.5 million men in combat during the Korean campaign in 1951-53. An improvement over K-rations, they eventually offered the soldier three specially packaged different meals, designed for morning, noon, and evening chow.

While solving the trooper's nutritional problem with a variety of concentrated foods, C-rations were still a mighty lackluster diet by civilian standards.

Today, most men in Vietnam get centrally prepared class "A" meals. Rivaling civilian offerings, these meals include fresh meat, vegetables, fruit, milk and coffee, and butter.

The morning's menu, wherever it's offered, is likely to include a choice of apple or orange juice, dry or hot cereal, plain bread or

toast, milk and coffee, bacon, and eggs any way Joe likes them—sunnyside up, scrambled, or once-over-lightly.

C-rations are still available and useful, too. But they are less commonly used than they were during Korea.

The several branches of our Nation's armed forces have now balanced the type and quality of food served. "Gravy" no longer symbolizes the Navy. Nor do beans epitomize the Army.

Both military procurement and consumption of dry edible beans, in fact, have dropped sharply since the Korean conflict. Men in uniform have been eating far fewer beans per person in recent years than their civilian relatives at home.

Back in 1951-53, military personnel finished off 14.9 pounds of beans per person against a 7.9 pound civilian average. By 1957-59, the military figure had

dropped to 4.4 pounds per man—less than the 7.7-pound civilian rate. In 1965-67, the military rate had dropped even further to 4.2 lbs. per man, while the civilian level was 6.7 pounds per person. Availability of more diversified, foods with comparable nutrient value has been a factor in the decline.

Purchases of beef, chicken, and turkey by the Department of Defense have meanwhile more than offset the onetime military bill for beans.

Although current per capita military procurement of all meat is up only slightly from 1951-53, it is still nearly double that of civilians.

Today's average soldier puts away more than 200 pounds of beef, upwards of 80 pounds of pork, more than 15 pounds of veal, and over a pound of lamb in a year, according to latest figures. That's more than twice the beef,

over 20 pounds more pork, and more than thrice the veal consumed by his civilian counterpart.

Military men are outmaneuvered in only one meat area—lamb. The average civilian takes in 3 pounds of lamb for 1 pound eaten by his military counterpart.

When it comes to eggs, per capita use has declined since the early fifties in both the military and civilian sectors. During Korean days, servicemen downed about 446 eggs per man in a year—either as individual servings or in prepared foods. This was about 59 more per person than civilians ate. Today's trooper manages only around 395 yolks and whites a year, but he's still about 78 ahead of the civilian pace.

As for turkey, both military and civilian consumption rates have climbed since 1951-53. The military appetite for the noble bird, however—at 15.8 pounds annually—continues to be about

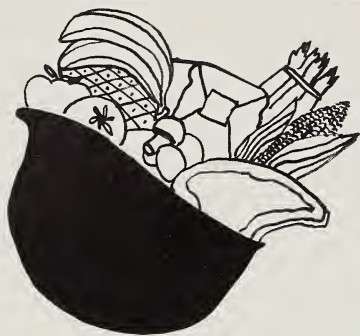
double that of the civilian.

Use of chicken, too, is up in both markets. But the civilian consumption rate—now at 35.5 pounds per person—outstrips the military by a little over 3 pounds.

For most dairy products (except cheese) military per capita use exceeds civilian. One reason: Individuals in a mounting civilian population have been taking a smaller share since the fifties, while total military purchases of dairy products have remained at fairly stable levels.

Some marked changes have occurred, however, in military consumption of dairy products by type. For example, use of condensed and evaporated milk has fallen off from 38.6 pounds per man in 1951-53 to only 14.2 pounds today.

Offsetting the drop in canned milk consumption, servicemen now use 355 pounds of fluid milk and cream per man yearly—about



MORE MEAT AND MILK—FEWER BEANS—ON MILITARY MENUS show up among changes in U.S. per capita food use over past 15 years. Shifts in food consumption pattern are shown below for selected commodities measured by primary distribution weight. No allowance is made for military eating out of civilian supplies, nor civilians eating out of military supplies.

	1951-53			1965-67		
	Military	Civilian	Total	Military	Civilian	Total
<i>Pounds</i>						
Meat:						
Beef	164.4	65.3	67.7	209.0	103.0	104.7
Veal	17.7	7.7	8.0	15.2	4.5	4.7
Lamb and mutton	1.4	4.1	4.1	1.3	3.9	3.8
Pork (excluding lard)	112.3	69.3	70.2	82.3	60.1	60.5
Total (carcass weight)	296.0	146.4	150.0	307.7	171.5	173.7
Poultry products:						
Eggs (farm basis)—number	446	387	389	395	317	318
Chicken (ready-to-cook)	28.6	21.9	22.1	32.3	35.5	35.5
Turkey (ready-to-cook)	11.1	4.6	4.8	15.8	8.0	8.1
Dairy products:						
Total milk fat solids (including butter)	30.6	27.6	27.8	29.0	22.2	22.3
Total nonfat milk solids	42.6	43.9	43.9	43.5	42.0	42.0
Cheese	6.3	7.4	7.4	6.1	9.7	9.7
Condensed and evaporated milk	38.6	17.8	18.2	14.2	9.8	9.9
Fluid milk and cream (milk equivalent)	257	350	349	355	295	296
Ice cream (product weight)	28.6	17.8	18.0	30.0	18.2	18.4
Fats and oils:						
Butter (actual weight)	12.6	8.9	9.0	12.3	5.9	6.0
Lard	6.0	11.8	11.7	.3	5.8	5.7
Shortening	13.1	9.8	9.9	18.7	15.3	15.3
Total fat content	46.3	43.4	43.5	50.3	48.3	48.3
Fruits:						
All fresh (farm weight)	62.9	113.4	112.2	62.3	81.5	80.1
Processed:						
Canned fruit and chilled citrus	89.4	20.6	22.1	71.9	23.4	24.1
Canned juice and chilled citrus juice	30.9	14.1	14.4	40.6	14.5	15.0
Frozen (including juices)	4.9	3.1	3.1	14.5	8.9	9.0
Vegetables:						
Fresh (commercial sales)	101.1	110.9	110.7	95.2	98.6	98.5
Canned (excluding potatoes and sweetpotatoes)	121.1	41.5	43.3	104.8	45.9	46.8
Frozen (excluding potatoes)	18.0	4.7	5.0	19.7	9.1	9.2
Dry edible beans	14.9	7.9	8.1	4.2	6.7	6.6
Coffee (green bean basis)	30.6	16.8	17.1	18.7	14.7	14.7
Total food:						
Index (1957-59 = 100)	137.0	99.1	100.2	119.2	101.4	101.7
Proportion of total use	2.8	97.2	100.0	2.2	97.8	100.0

98 pounds more apiece than they did 15 years ago.

In the fruit and vegetable department, per capita military use of canned fruit and fruit juices was up to 112.5 pounds yearly during 1965-67. This was triple the civilian level of consumption. In the same period, annual military procurement of canned and frozen vegetables was 124.5 pounds per man—twice the civilian rate.

Per capita consumption of fresh fruits and vegetables is lower in the military than in civilian life. But military rates have been maintained near 1951-53 levels, while civilian consumption rates for these items have been declining since the fifties.

Potato peelers on K.P. duty got little relief during the two comparison periods, however. Military procurement of potatoes in 1951-53 and 1965-67 exceeded civilian use per person by 74.2 pounds and 60.9 pounds, respectively—even though military use per man dropped off around 10 pounds between the two wartime periods.

Most servicemen are habitual coffee drinkers. They average close to 900 cups a year as individuals. This comes out, unbrewed, to about 19 pounds annually per man—about 4 pounds more than the civilian rate.

Across the board, military food procurement per capita during 1965-67 was 19 percent higher than the 1957-59 base figure of 100. Over the same stretch, civilian per capita food use rose only 1.4 percent.

Military consumption is mostly by mature males with hearty appetites, while civilian figures include normal portions eaten by women and children.

The military establishment, however, accounts for only a little over 2 percent of total U. S. food use. As a result, total U. S. food use per capita has expanded only slightly—1.7 percent—since 1957-59. (18)



RECENT PUBLICATIONS

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective States.

SUPPLY AND DEMAND, IMPORTS AND EXPORTS OF SELECTED AGRICULTURAL PRODUCTS IN THE NETHERLANDS, FORECAST FOR 1970 AND 1975. Agricultural Economics Research Institute, The Hague, Netherlands, in cooperation with the Economic Research Service. Unnumb. Pub.

The publication projects that during the first half of the 1970's prices of products for which there is a strong demand in the EEC will rise, while products for which EEC demands are weak will drop in price.

IMPLICATIONS OF COMMON MARKET MEMBERSHIP FOR BRITISH AGRICULTURE. W. E. Pearson and B. D. Hedges, Foreign Regional Analysis Division. ERS-For. 211.

Farm prices would rise, but so would the cost of livestock production in United Kingdom if it became a member of the EEC. Britain's balance of payments would also be adversely affected.

THE FARM LAND MARKET IN THE MISSISSIPPI RIVER DELTA COTTON REGION 1964-1965. J. B. Penn, B. Bolton, and W. F. Woolf, Louisiana State University, in cooperation with the Farm Production Economics Division. La. Agr. Expt. Sta., DAE Research Report 372.

Data for this study were obtained on land transfers occurring during a specific period in 17 Delta counties and parishes in Arkansas, Louisiana, and Mississippi. Buyers were contacted through mail questionnaires and personal interviews to obtain information about the transfers.

GOVERNMENTAL RESPONSE TO URBANIZATION: THREE TOWNSHIPS ON THE RURAL-URBAN GRADIENT. A. D. Sokolow, Michigan State University, in cooperation with the Economic Research Service. AER-132.

Townships extending westward from Lansing, and included in that core city's metropolitan area, are covered in this comparative study.

From 1950 to 1964, the most urban of the three communities initiated the greatest number of changes in its local governmental programs, structure, finance, and administration.

INDEXES OF AGRICULTURAL PRODUCTION FOR THE WESTERN HEMISPHERE EXCLUDING THE UNITED STATES. Western Hemisphere Branch, Foreign Regional Analysis Division. ERS-For. 44 (1968).

Publication gives indexes for 1958 through 1966 with preliminary figures for 1967.

SUPPLEMENT FOR 1967 TO WOOL STATISTICS AND RELATED DATA, 1920-64. Commodity Analysis Branch, Economic and Statistical Analysis Division. Stat. Bull. No. 363, Supp. for 1967.

Supersedes the 1966 supplement to Wool Statistics and Related Data, 1920-64.

PRODUCTION AND USES OF SELECTED FARM PRODUCTS IN FRANCE, PROJECTIONS TO 1970 AND 1975. Centre de Recherches et de Documentation sur la Consommation, Paris, France, in cooperation with the Economic Research Service. Unnumb. Pub.

Farming ceased to be a traditional way of life and became a commercial industry in France during the past 15 years.

Now, prices for cheese, beef, veal, and lamb are projected to increase, during the first half of the 1970's, while those of poultry, milk, fat, and fruit are projected to decrease.

RESOURCE USE ADJUSTMENTS IN SOUTHERN RICE AREAS: PART II. EFFECTS OF PRICE CHANGES WITH SELECTED RICE ALLOTMENT AREAS. Agricultural Experiment Stations of Arkansas, Louisiana, Mississippi, and Texas, in cooperation with the Economic Research Service. South. Coop. Ser. Bull. 131.

Bulletin studies kinds and magnitudes of resource adjustments that would be desirable at different levels of rice allotments and prices received.

EFFECTS OF ALTERNATIVE PRODUCTION PRACTICES ON COSTS AND RETURNS IN PRODUCING COTTON IN SELECTED AREAS OF GEORGIA. N. R. Martin and others, Farm Production Economics Division, in cooperation with the

University of Georgia, Georgia Expt. Sta. Res. Bull. 34.

The study on which this publication is based is an integral part of a research program concerned with reducing the costs of cotton production as provided for by the Congress in the Agricultural Act of 1964.

IRRIGATION PRACTICES AND COSTS IN NORTH DAKOTA. W. McMartin, Natural Resource Economics Division, and R. Bergen, North Dakota State University. N. Dak. Agr. Expt. Sta. Bull. No. 474.

In this evaluation of several types of irrigation systems the resource requirements are determined for selected crops, and descriptive information is provided on the operating characteristics of each type of irrigating system.

AUSTRALIA: LONG TERM PROJECTIONS OF AGRICULTURAL SUPPLY AND DEMAND, 1965 AND 1980. F. Gruen and others, Monash University (Australia) in cooperation with the Foreign Regional Analysis Division, Economic Research Service, and with the Foreign Agricultural Service. ERS-Unnumb. Pub.

This study—one of a series concerned with various countries—largely involves production, consumption, and marketing of Australian agricultural commodities, competitive with U.S. products.

ECONOMIC AND OPERATIONAL CHARACTERISTICS OF CATTLE RANCHES: TEXAS HIGH PLAINS AND ROLLING PLAINS. C. C. Boykin, Farm Production Economics Division. Texas A&M University, Agr. Expt. Sta. MPP-866.

The ranch budget of this study takes in consideration the ranch size, land use, cattle system, and management and indicates how changes in resource situations—such as range forage supply or prices—would alter the production relationships, costs, and income.

CHARACTERISTICS OF NORTH-WEST BEEF INDUSTRY. J. B. Johnson, Farm Production Economics Division, and R. E. Vaile, Oregon State University. Oregon Agr. Expt. Sta. Spec. Rept. 256.

Scope of subject matter includes livestock and livestock products, livestock inventories, live cattle movements, and other items.

EXPANDING AGRICULTURAL TRADE FOR PAKISTAN: PROJECTIONS AND IMPLICATIONS TO 1974-75 AND 1984-85. J. B. Parker, Foreign Regional Analysis Division. ERS-For. 217.

Principal supply and demand projections and their implications for Pakistan, the United States, and other countries concerned with the market for agricultural products in Pakistan are presented in this report.

Numbers in parentheses at end of stories refer to sources listed below:

1. P. L. Holm, Data Systems and Information Retrieval Adaptable to Water Resources (S); 2. W. D. Rasmussen (SM); 3. H. W. Delvo, Herbicide Use in Nebraska (S); 4. J. T. Larsen (SM); 5. A. D. Sokolow, Government Response to Urbanization: Three Townships on the Rural-Urban Gradient, AER-132 (P); 6. H. H. Spurlock, Rural Housing Conditions in the Arkansas, Missouri, and Oklahoma Ozarks, Ark. Agr. Expt. Sta. (M²); 7. J. L. McCoy and O. W. Holmes, Some Problems in Identifying the Farm Poor (M); 8. B. Novak, A Selected Bibliography on Special Districts and Authorities in the United States, Annotated, Misc. Pub. 1087 (P); 9. H. P. Chapman, W. W. Bauder, and J. A. Doerflinger (SM); 10. E. D. Solberg, Agricultural-Related Studies, Plans, and Reports (M); 11. O. W. Holmes, The Impact of Public Spending in a Low-Income Area: A Case Study of Fort Leonard Wood, Mo., AER-135 (P); 12. J. W. Thompson, Some Considerations for Renderers (S); 13. J. W. Thompson, Ten Management Considerations for Tanners (S); 14. R. E. Freeman, Geographic Pattern of Fluid Milk Prices,

MRR-818 (P); 15. J. A. Hopkins, The Latin American Farmer (M); 16. J. N. Smith, Argentine Agriculture: Trends in Production and World Competition, ERS-For. 216 (P); 17. V. J. Willard, Regional Integration of the Chemical Fertilizer Industry in Latin America, ERS-For. 232 (P); 18. National Food Situation, NFS-124 (P); 19. W. H. Scofield and G. W. Kaufman, Corporations Having Agricultural Operations: A Preliminary Report, AER-142 (P); 20. National Food Situation, NFS-125 (P); 21. Farmer Cooperative Service (SM); 22. Foreign Regional Analysis Division (SM); 23. H. Linstrom, W. Faught, and F. Barlow, Jr., Present Status and the Future of Textile Fibers (S), and Wool Situation, TWS-84 (P). Cover photo and pictures on page 14, courtesy of Braniff Airways and Pan American Union.

Speech (S); published report (P); unpublished manuscript (M); special material (SM); *State publications may be obtained only by writing to the experiment station or university cited.

ECONOMIC TRENDS

ITEM	UNIT OR BASE PERIOD	'57-'59 AVERAGE	1967		1968		
			YEAR	JULY	MAY	JUNE	JULY
Prices:							
Prices received by farmers	1910-14 = 100	242	253	256	260	259	260
Crops	1910-14 = 100	223	224	221	235	229	221
Livestock and products	1910-14 = 100	258	277	285	281	285	294
Prices paid, interest, taxes and wage rates	1910-14 = 100	293	342	344	354	354	355
Family living items	1910-14 = 100	286	322	324	335	335	336
Production items	1910-14 = 100	262	287	289	293	293	293
Parity ratio		83	74	74	73	73	73
Wholesale prices, all commodities	1957-59 = 100	—	106.1	106.5	108.5	108.7	109.1
Industrial commodities	1957-59 = 100	—	106.3	106.0	108.6	108.8	108.9
Farm products	1957-59 = 100	—	99.7	102.8	103.6	102.5	103.9
Processed foods and feeds	1957-59 = 100	—	111.7	113.1	113.6	114.6	115.9
Consumer price index, all items	1957-59 = 100	—	116.3	116.5	120.3	120.9	—
Food	1957-59 = 100	—	115.2	116.0	118.8	119.1	—
Farm Food Market Basket: ¹							
Retail cost	Dollars	983	1,081	1,091	1,114	1,117	—
Farm value	Dollars	388	413	434	434	435	—
Farm-retail spread	Dollars	595	668	657	680	682	—
Farmers' share of retail cost	Percent	39	38	40	39	39	—
Farm Income: ⁷							
Volume of farm marketings	1957-59 = 100	—	124	122	98	112	120
Cash receipts from farm marketings	Million dollars	32,247	42,788	3,482	2,995	3,188	3,386
Crops	Million dollars	13,766	18,383	1,572	852	1,228	1,457
Livestock and products	Million dollars	18,481	24,405	1,910	2,143	1,960	1,929
Realized gross income ²	Billion dollars	—	49.1	—	—	50.7	—
Farm production expenses ²	Billion dollars	—	34.8	—	—	35.9	—
Realized net income ²	Billion dollars	—	14.2	—	—	14.8	—
Agricultural Trade:							
Agricultural exports	Million dollars	4,105	³ 6,383	472	492	461	—
Agricultural imports	Million dollars	3,977	³ 4,454	347	434	387	—
Land Values:							
Average value per acre	1957-59 = 100	—	⁴ 166	160	⁵ 170	—	—
Total value of farm real estate	Billion dollars	—	⁴ 188.9	182.0	⁵ 193.7	—	—
Gross National Product: ²							
Consumption ²	Billion dollars	457.4	789.7	—	—	851.6	—
Investment ²	Billion dollars	294.2	492.2	—	—	527.6	—
Government expenditures ²	Billion dollars	68.0	114.3	—	—	127.4	—
Net exports ²	Billion dollars	92.4	178.4	—	—	195.6	—
	Billion dollars	2.7	4.8	—	—	.9	—
Income and Spending: ⁶							
Personal income, annual rate	Billion dollars	365.3	628.8	629.8	678.2	683.7	689.2
Total retail sales, monthly rate	Million dollars	17,098	26,125	26,444	27,993	28,218	29,055
Retail sales of food group, monthly rate	Million dollars	4,160	6,011	6,002	6,425	6,426	—
Employment and Wages: ⁶							
Total civilian employment	Millions	63.9	74.4	74.5	75.8	76.0	76.0
Agricultural	Millions	5.7	3.8	3.8	3.9	3.9	3.8
Rate of unemployment	Percent	5.0	3.8	3.9	3.5	3.8	3.7
Workweek in manufacturing	Hours	39.8	40.6	40.5	40.9	40.9	40.9
Hourly earnings in manufacturing, unadjusted	Dollars	2.12	2.83	2.82	2.99	3.00	3.00
Industrial Production: ⁶							
	1957-59 = 100	—	158	157	164	165	165
Manufacturers' Shipments and Inventories: ⁶							
Total shipments, monthly rate	Million dollars	28,745	44,745	44,865	49,420	49,954	—
Total inventories, book value end of month	Million dollars	51,549	82,425	80,603	84,505	84,515	—
Total new orders, monthly rate	Million dollars	28,365	44,999	45,481	49,400	49,396	—

¹ Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1959-61—estimated monthly. ² Annual rates seasonally adjusted second quarter. ³ Preliminary. ⁴ As of November 1, 1967. ⁵ As of March 1, 1968. ⁶ Seasonally adjusted. ⁷ Annual and quarterly data are on 50-State basis; monthly data are on 48-State basis.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

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Attention Moths

Sweater girls and tweedy young men are among the wool industry's best friends.

Perhaps that's one reason why per capita use of wool in the United States is expected to hold its own in 1980 at about 2.7 pounds per person.

Wool consumption in the developing countries is also expected to hold its own in the decade ahead.

But that means only 0.2 pound, or a little over 3 ounces per person. (Wool and weather don't go together in many of the developing countries.)

On a worldwide basis, wool production and consumption are expected to show an overall increase, but per capita consumption is likely to decline from about 1.1 pounds a year during 1959-61 to about 0.9 pound in 1980.

The decline in consumption will probably be concentrated in Free World developed countries other than the United States. Per capita wool use in these nations has been averaging 2.6 pounds in recent years, it is expected to fall off to 2.4 pounds by 1980.

Meanwhile, manmade fibers in roads in total fiber use continues to rise.

Last year synthetic fibers accounted for 27 percent of fiber consumption in the wool industries of six countries. This represented a rise of 3 percent from 1966.

While virgin wool made up half these industries' consumption in 1966, it declined to 48 percent in 1967. (23)

THE FARM INDEX

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